APPENDIX B TO SUBPART B OF PART 431—UNIFORM TEST METHOD FOR MEASURING NOMINAL FULL LOAD EFFICIENCY OF ELECTRIC MOTORS

1. *Definitions.*

Definitions contained in §§431.2 and 431.12 are applicable to this appendix.

2. *Test Procedures.*

Efficiency and losses shall be determined in accordance with NEMA MG1–1993 with Revisions 1 through 4, paragraph 12.58.1, "Determination of Motor Efficiency and Losses," (Incorporated by reference, see §431.15) and either:

(1) CSA International (or Canadian Standards Association) Standard C390–93 Test Method (1), (Incorporated by reference, see §431.15), *Input-Output Method With Indirect Measurement of the Stray-Load Loss and Direct Measurement of the Stator Winding (I^2R), Rotor Winding (I^2R), Core and Windage-Friction Losses*, or

(2) IEEE Standard 112–1996 Test Method B, *Input-Output With Loss Segregation*, (Incorporated by reference, see §431.15) with IEEE correction notice of January 20, 1998, except as follows:

(i) Page 8, subclause 5.1.1., *Specified temperature*, the introductory clause does not apply. Instead the following applies:

The specified temperature used in making resistance corrections should be determined by one of the following (Test Method B only allows the use of preference (a) or (b).), which are listed in order of preference.

(ii) Page 17, subclause 6.4.1.3., *No-load test*, the text does not apply. Instead, the following applies:

See 5.3 including 5.3.3, the separation of core loss from friction and windage loss. Prior to making this test, the machine shall be operated at no-load until the input has stabilized.

(iii) Page 40, subclause 8.6.3, *Termination of test*, the third sentence does not apply. Instead, the following applies:

For continuous rated machines, the temperature test shall continue until there is 1 °C or less change in temperature rise over a 30-minute time period.

(iv) Page 47, at the top of 10.2 form B, immediately after the line that reads "Rated Load Heat Run Stator Winding Resistance Between Terminals," the following additional line applies:

Temperature for Resistance Correction (t_s) = – °C (See 6.4.3.2).

(v) Page 47, at the bottom of 10.2 Form B, after the first sentence to footnote t_t, the following additional sentence applies:

The values for t_s and t_t shall be based on the same method of temperature measurement, selected from the four methods in subclause 8.3.

(vi) Page 47, at the bottom of 10.2 Form B, below the footnotes and above "Summary of Characteristics," the following additional note applies:

NOTE: The temperature for resistance correction (t_s) is equal to [(4) – (5) + 25 °C].

(vii) Page 48, item (22), the torque constants "k = 9.549 for torque, in N·m" and "k = 7.043 for torque, in 1bf·ft" do not apply. Instead, the following applies:

"k_2 = 9.549 for torque, in N·m" and "k_2 = 7.043 for torque, in 1bf·ft."

(viii) Page 48, at the end of item (27), the following additional reference applies:

"See 6.4.3.2."

(ix) Page 48, item (29). "See 4.3.2.2, Eq. 4," does not apply. Instead the following applies:

Is equal to (10)·[k_1 + (4) – (5) + 25 °C] / [k_1 + (7)], see 6.4.3.3."

3. *Amendments to test procedures.*

Any revision to IEEE Standard 112–1996 Test Method B with correction notice of January 20, 1998, to NEMA Standards Publication MG1–1993 with Revisions 1 through 4, or to CSA Standard C390–93 Test Method (1), subsequent to promulgation of this appendix B, shall not be effective for purposes of test procedures required under Part 431 and this appendix B, unless and until Part 431 and this appendix B are amended.

APPENDIX C TO SUBPART B OF PART 431—COMPLIANCE CERTIFICATION

Certification of Compliance With Energy Efficiency Standards for Electric Motors

(Office of Management and Budget Control Number: 1910–5104. Expires 09/30/2007)

1. Name and Address of Company (the "company"):

_____

_____

_____

_____

2. Name(s) to be Marked on Electric Motors to Which this Compliance Certification Applies:

_____

_____

_____

_____

3. If manufacturer or private labeler wishes to receive a unique Compliance Certification number for use with any particular brand name, trademark, or other label name, fill out the following two items:

A. List each brand name, trademark, or other label name for which the company requests a Compliance Certification number:

_____

_____

_____

B. List other name(s), if any, under which the company sells electric motors (if not listed in item 2 above):

_____